

Claims:

1. An isolated polynucleotide comprising,
a polynucleotide sequence set forth in SEQ ID NO 1, or which codes for an amino acid sequence set forth in SEQ ID NO 2, or complements thereto.

5

2. An isolated polynucleotide of Claim 1, which codes without interruption for an amino acid sequence set forth in SEQ ID NO 2, or a complement thereto.

2. 3. An isolated polynucleotide consisting of:
a polynucleotide sequence for amino acid positions 1-23, 24-538, 539-833, and 834-1036, as set forth in SEQ ID NO 2, or complements thereto.

10

3. 4. An isolated polynucleotide consisting of:
a polynucleotide sequence which is specific for KSE132 and which is selected from the nucleotide sequences coding for amino acids 1-23, 24-538, and 834-1036 as set forth in SEQ ID NO 2, or complements thereto.

15

5. An isolated polynucleotide of claim 4, wherein said fragment is effective in a polymerase chain reaction.

20

4. 6. An isolated polypeptide comprising,
the amino acid sequence set forth in SEQ ID NO 2, or, amino acids 1-23, 24-538, or 834-1036 as set forth in SEQ ID NO 2.

25

5. 7. An isolated polypeptide,
selected from the amino acid sequence of amino acids 1-23, 24-538, or 834-1036 as set forth in SEQ ID NO 2 and which is specific-for KSE132.

30

8. A method of treating a disease of brain, pancreas, and testes tissues showing altered expression of KSE132, comprising:

administering to a subject in need thereof a therapeutic agent which is effective for regulating expression of said KSE132 of Claim 1.

9. A method of claim 8, wherein said agent is an antibody or an antisense which is effective to inhibit translation of said gene.

5 10. A method of diagnosing a brain, pancreas, ~~and~~^{or} testes tissues disease associated with abnormal KSE132, or determining a subject's susceptibility to such disease, comprising:
assessing the expression of KSE132 of Claim 1 in a tissue sample comprising brain, pancreas, and testes tissues cells.

10 11. A method of claim 10, wherein assessing is:
measuring expression levels of said gene, determining the genomic structure of said gene, determining the mRNA structure of transcripts from said gene, or measuring the expression levels of polypeptide coded for by said gene.

15 12. A method of claim 10, further comprising:
comparing said expression to the expression of said gene of a known normal tissue.

20 13. A method of claim 10, wherein said assessing detecting is performed by:
Northern blot analysis, polymerase chain reaction (PCR), reverse transcriptase PCR, RACE PCR, or *in situ* hybridization, and
using a polynucleotide probe having a sequence selected from SEQ ID NO 1, or complements thereto.

25 14. A method of assessing a therapeutic or preventative intervention in a subject having a brain, pancreas, ~~and~~^{or} testes tissues disease, comprising,
determining the expression levels of KSE132 of Claim 1 in a tissue sample comprising brain, pancreas, ~~and~~^{or} testes tissues cells, or cells derived from brain, pancreas, ~~and~~^{or} testes tissues.

30

15. A method for identifying an agent that modulates the expression of KSE132 in brain, pancreas, and testes tissues cells, cells derived from brain, pancreas, and testes tissues, or brain, pancreas, and testes tissues progenitor cells, comprising,

contacting a cell population with a test agent under conditions effective for said test agent to modulate the expression of KSE132 of Claim 1 in brain, pancreas, and testes tissues cells, and

determining whether said test agent modulates said KSE132.

16. A method of detecting polymorphisms in KSE132 comprising:

comparing the structure of: genomic DNA comprising all or part of KSE132 of Claim 1, mRNA comprising all or part of KSE132, cDNA comprising all or part of KSE132, or a polypeptide comprising all or part of KSE132, with the structure of KSE132 set forth in SEQ ID NO 1.

17. A non-human, transgenic mammal whose genome comprises a functional disruption of KSE132 of Claim 1.

18. A mammalian cell whose genome comprises a functional disruption of KSE132 of Claim 1.

19. A mammalian cell of claim 18, wherein said cell is a brain, pancreas, or testis cell, a cell derived from brain, pancreas, or testis tissues, or a brain, pancreas, and testes tissues progenitor cell.

20. A method of advertising KSE132 for sale, commercial use, or licensing, comprising, displaying in a computer-readable medium a polynucleotide set forth in SEQ ID NO 1 AND 2, effective specific fragments thereof, or complements thereto.

21. An antibody which is specific for KSE132 and which is selected from the amino acid sequence of amino acids 1-23, 24-538, or 834-1036 as set forth in SEQ ID NO 2.